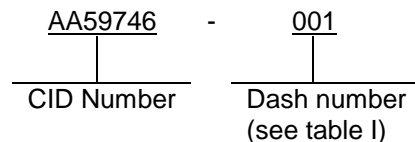


COMMERCIAL ITEM DESCRIPTION

FUSE, CARTRIDGE, SUBMINIATURE, TIME DELAY, AXIAL LEAD

The General Services Administration has authorized the use of this Commercial Item Description (CID) for all federal agencies.

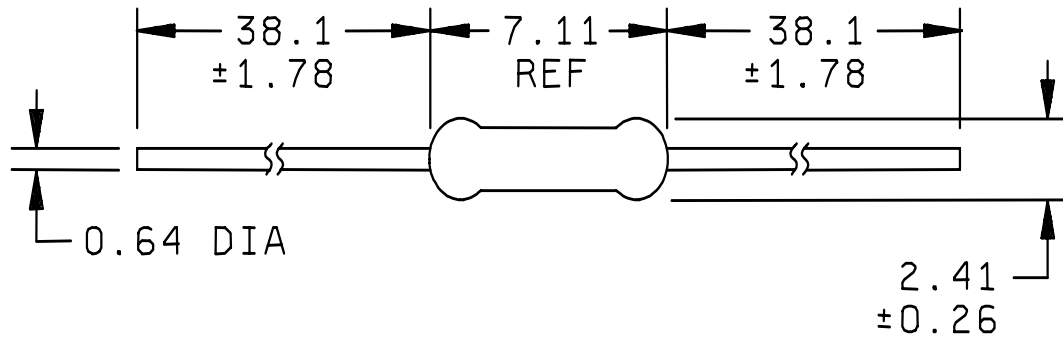
1. **SCOPE.** This CID covers the general requirements for axial leaded, subminiature fuse cartridges. Fuses covered by this CID are intended for commercial/industrial applications.
2. **CLASSIFICATION.** This CID uses a classification system that is included in the Part Identification Number (PIN) as shown in the following example (see 7.1).



3. SALIENT CHARACTERISTICS.

- 3.1 Interface and physical dimensions. Fuses supplied to this CID shall be as specified herein (see figure 1).
- 3.2 Ampere rating. The ampere rating shall be as specified in table I.
- 3.3 Voltage rating. The voltage rating shall be 125 V ac/dc maximum.
- 3.4 Interrupting ratings. The interrupting ratings shall be 50 amperes at 125 V ac/dc.
- 3.5 Opening time characteristics. The opening time characteristics shall be as indicated in table II.
- 3.6 Operating temperature. The operating temperature shall be -55°C (-67°F) to +125°C (257°F).
- 3.7 Shock. Fuses shall meet shock requirements in accordance with method 213 of MIL-STD-202, test condition I (100 g's peak for 6 milliseconds).
- 3.8 Vibration. Fuses shall meet vibration requirements in accordance with method 201 of MIL-STD-202, (10 Hz to 55 Hz); method 204, test condition C (55 – 2000 Hz at 10 g's peak).

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any pertinent data which may improve this document should be addressed to: Defense Supply Center, Columbus, ATTN: DSCC-VAT, 3990 East Broad Street, Columbus, OH 43216-5000, or telephone (614) 692-0548, or facsimile (FAX) (614) 692-6939.



mm	Inches
0.26	0.0104
0.64	0.025
1.78	0.0702
2.41	0.0950
7.11	0.280
38.1	1.5

NOTES:

1. Dimensions are in millimeters.
2. Tolerance is ± 0.15 mm (0.006 inch), unless otherwise specified.

Figure 1. Configuration and dimensions.

TABLE I. Electrical characteristics.

AA59746-	Ampere rating	Nominal cold resistance (Ohms)	Nominal melting I^2t ($A^2sec.$)
001	3/8	1.74	0.0850
002	1/2	1.13	0.210
003	3/4	0.460	0.760
004	1	0.267	2.01
005	1 1/2	0.117	3.94
006	2	.712	7.60
007	2 1/4	.0630	9.28
008	2 1/2	.0520	13.0
009	3	.0380	21.0
010	3 1/2	.0240	26.8
011	4	.0194	35.0
012	5	.0133	54.8
013	7	.0092	105.0

TABLE II. Rating versus opening time.

Percent of ampere rating	Opening time
100 percent	4 hours, minimum.
200 percent	1 second, minimum; 60 seconds maximum.
300 percent	0.2 seconds, minimum; 3 seconds, maximum.
800 percent	0.02 seconds, minimum; 0.1 seconds, maximum.

3.9 Salt Spray. Fuses shall meet the salt spray requirements in accordance with method 101 of MIL-STD-202, test condition B.

3.10 Resistance to soldering heat. Fuses shall meet resistance to soldering heat requirements in accordance with method 210 of MIL-STD-202, test condition C (20 seconds at 260°C (500°F)).

3.11 Thermal shock. Fuses shall meet thermal shock requirements in accordance with method 107 of MIL-STD-202, test condition B (-65°C (-85°F) to +125°C (149°F)).

3.12 Moisture resistance. Fuses shall meet moisture resistance requirements in accordance with method 106 of MIL-STD-202 (90 – 98 percent relative humidity (RH), heat (65°C (149°F)).

3.13 Materials. Fuses shall have a encapsulated, epoxy-coated body with solder coated copper wire leads.

3.14 Soldering parameters. Fuses shall be able to withstand, without electrical or mechanical damage to the fuse, a wave solder of +260°C (+500°F) for 3 seconds maximum.

3.15 Solderability. Fuses shall meet solderability requirements in accordance with method 208 of MIL-STD-202.

3.16 Lead Pull Force. Fuses shall be able to withstand a 10 lb. axial pull test in accordance with method 211 of MIL-STD-202, test condition A.

3.17 Marking. Fuses supplied to this CID shall be marked with the manufacturer's standard commercial marking.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

4.1 Recycled/recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

5. PRODUCT CONFORMANCE PROVISIONS.

5.1 Product conformance. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The Government reserves the right to require proof of such conformance.

5.2 Market acceptance. The following market acceptance criteria are necessary to document the quality of the product to be provided under this CID:

- a. The company producing the item must have been producing a product meeting the requirements of this CID for at least 2 years.
- b. The company must have sold 1,000 units meeting this CID in the commercial marketplace over the past 2 years.

6. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order. In addition, enclosed link fuses may be supplied individually or in a quantity of 4000 on a 52.4 mm (2.062 inch) wide T1, tape reel in accordance with EIA-296.

7. NOTES.

7.1 PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See section 2 for PIN format example.

7.2 Commercial and Government Entity (CAGE) code. For ordering purposes, inventory control, and submission of these fuse cartridges to DSCC under the Military Parts Control Advisory Group (MPCAG) evaluation program; CAGE code 58536 should be used.

7.3 Source of document.

Military standards

MIL-STD-202 - Test Methods for Electronic and Electrical Component Parts.

(Copies of military standards are available from the Document Automation and Production Service, Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094).

Other Publications.

ELECTRONICS INDUSTRY ALLIANCE (EIA)

EIA 296 - Lead Taping of Components in Axial Lead Configuration for Automatic Handling.

(Applications for copies should be addressed to the Electronics Industry Alliance, 2500 Wilson Boulevard, Arlington, VA 22201-3834.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

7.3 Ordering data. The contract or order should specify the following:

- a. CID document number, revision, and CID PIN.
- b. Product conformance provisions.
- c. Packaging requirements.

7.4 Commercial products. As part of the market analysis and research effort, this CID was coordinated with the following manufacturers of commercial products. At the time of CID preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

MFR's CAGE

75915

MFR's name and address

Littelfuse Incorporated
 800 E. Northwest Highway
 Des Plaines, IL 60016-3096
 Phone number: (847) 824-1188
 Facsimile number: (847) 391-0894
 E-mail: electronics@littelfuse.com
 URL: www.littelfuse.com

7.5 Part number (P/N) supersession data. This CID PIN supersedes the following manufacturers' P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE III. P/N supersession data.

CID dash number AA59746- (see table I)	MFR's CAGE	MFR's P/N <u>1/</u>
001	75915	473.375
002	75915	473.500
003	75915	473.750
004	75915	473001
005	75915	47301.5
006	75915	473002
007	75915	4732.25
008	75915	47302.5
009	75915	473003
010	75915	47303.5
011	75915	473004
012	75915	473005
013	75915	473007

1/ The manufacturer's P/N shall not be used for procurement to the requirements of this CID. At the time of preparation of this CID, the aforementioned commercial products were reviewed and could be replaced by the CID P/N shown. For actual part marking requirements, see 3.17.

7.6 Government users. To acquire information on obtaining these fuses from the Government inventory system, contact Defense Supply Center, Columbus, ATTN: DSCC-CSB, Post Office Box 3990, Columbus, OH 43216-5000, or telephone (614) 692-7962.

MILITARY INTERESTS:

Custodians:
Navy - EC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA-CC

Project 5920-0767